



EDUCATIONAL DIGITAL MEDIA FOR PRESCHOOLERS

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A GUIDE FOR PARENTS & TEACHERS

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Boston UPK Study
Building a strong and equitable PreK system



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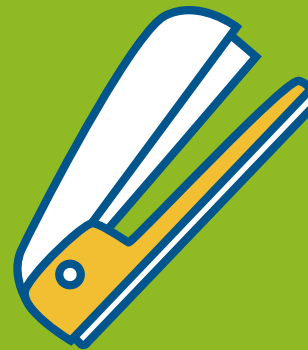
PRESCHOOLERS' ENGAGEMENT WITH DIGITAL MEDIA

TIPS ON USAGE

- **Learning together helps:** Watching shows and using apps with children can make a big difference in how much they learn! Research suggests that specific types of co-viewing and joint play can improve education outcomes of kids, including those from immigrant families.
- **Learning can happen at any time:** Parents are busy and don't always have time to oversee their child's learning. Learning can often happen during everyday tasks and conversations. For example, when you are doing activities around the house try using vocabulary words from a TV show your child watches. You could also ask your child questions about their learning such as "*What kind of animal did the Wild Kratts meet today?*"
- **Balance academics and well-being:** Social and behavioral skills are important factors in Kindergarten readiness. As a result, it's important to look for media that focus on well-being, not just academics. For example, some research suggests that Daniel Tiger's Neighborhood may help young children develop social-emotional skills.
- **Pacing Matters:** Fast-paced entertainment cartoons appear to significantly impair children's executive functioning, in contrast to educational PBS shows. Look for shows that allow children to absorb new information gradually.



- **Look for feedback:** Recent research has shown the importance of kids receiving feedback while using apps. For example, a game on an app may get harder as your child progresses through different stages. Look for apps that offer children support such as visual cues and on-screen prompts for when they get stuck. This kind of structure allows children to build on what they already know.
- **Look for open-ended activities:** While structured learning activities are important, young children's digital media should also be open-ended enough to enable experimentation and creative learning processes rather than focusing on an end product.
- **Not all media are educational:** Use apps that have been tested in academic research or had input from an education expert. PBS and Khan Academy Kids are a good place to start! Some trusted websites for reviews and resources include:
 - Common Sense Media: See how shows and apps have been rated by experts, kids, and parents; you can also access distance learning resources.
 - Moms with Apps: Parent blog with media reviews, tips, and more.
 - Teachers with Apps: Teacher blog and searchable database of reviews.
- **Protect your privacy:** Many apps and websites store personal data about their users. Common Sense Media's Privacy Program is a great place to see how popular apps and websites rank on protecting user privacy. This is especially important to consider when sharing data like photos, videos, and information about school performance.



DIGITAL MEDIA FOR FAMILIES

AVAILABLE FOR BOTH APPLE AND ANDROID DEVICES

- **Peg+Cat**: PBS TV show and companion app. Cost: Free on PBS kids, app is \$2.99. Ages 3+ Content Area: Math. This research-backed program rates highly on Common Sense Media and supports children's understandings of ordinal numbers, spatial relationships, and 3D shapes.



- **Molly of Denali**: PBS TV show and award-winning companion app. Cost: Free. Ages 5+. Content Area: Literacy. This program supports children's informational text skills.



- **Khan Academy Kids**: App. Cost: Free. Ages: 8 and under. Content Area: All subject areas. Content is created around key areas including literacy, math, social-emotional development, problem-solving, and motor skills. The app features open-ended, creative activities such as storytelling, drawing and coloring-in, in addition to instructional videos and quizzes.



- **Play and Learn Science**: PBS app. Cost: Free. Ages 3+. Content Area: Science. A recent report found possible benefits for both children and parents as well as possible increases in understanding, vocabulary and excitement about science.



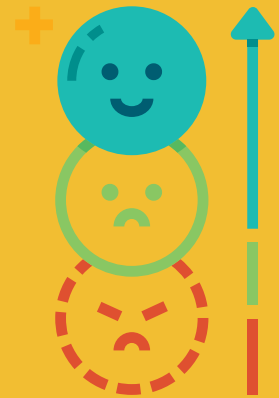
- **BPS Early Learning Home Page**: You'll find original educational videos, resources in Spanish, home learning tips, age-based curriculum resources, and much more!



- **Wild Kratts:** PBS TV show (currently on Amazon Prime) and companion app (\$3.99). Ages 6+ or advanced preschoolers. Content Area: Science (Zoology, biology, and ecology). While this show and app have been developed for children over the age of 6, some content may be useful for younger children. Part of the content has been funded by PBS's Ready to Learn Initiative.



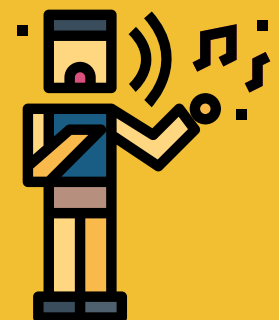
- **Daniel Tiger's Neighborhood:** PBS TV show. Cost: Free. Ages 3+. Content Area: Social and emotional development. There is some evidence that the show positively impacts preschoolers' empathy, self-efficacy, and emotion recognition when adults actively engage children in conversations about the content. There is also some evidence that suggests the TV show supports the learning of children with Autism Spectrum Disorder.



- **Epic!** App. Cost: Free for teachers and librarians. For others it's free for the first two weeks, then \$7.99/month. Ages: 1+. Content Area: Reading and language. Epic! is an extremely popular digital library for kids under the age of 12. It features over 40,000 books, educational videos, and quizzes relating to the library's books. Check out this video to get an overview.



- **Chrome Music Lab** Website. Cost: Free. Ages 3+. Content Area: Music. This is a website that makes learning music a fun and visual process. Many teachers use the site as a classroom resource to teach music and its relationship to science, math, and art. Examples of its use in classrooms can be found on this Twitter feed. Simply go to the website and start playing!



- **Other apps we recommend** based on their educational value and popularity:*
- **Endless**: This series includes apps such as Endless Alphabet, Endless Reader, Endless Numbers, and Endless Spanish. These are free apps covering literacy, language, and math skills for kids 8 and under.
- **Letter School**: Series for writing, spelling, and phonics. Most are apps free and all are for kids 8 and under.
- **Monkey School**: This app series includes Word School Adventure, Math School Sunshine, Preschool, and more. \$1.99 each. Math and literacy games for kids 8 and under.
- **Sago Mini**: This app series includes Ocean Swimmer and Forest Flyer. This is a collection of free apps that allow children to learn through open-ended play in different environments. Recommended for ages 5 and under.
- **Starfall**: This series includes Starfall ABCs, Starfall Numbers, and more. They are free apps that focus on early literacy and math. Recommended for ages 8 and under.

*List informed by [Tap, Click, Read](#)

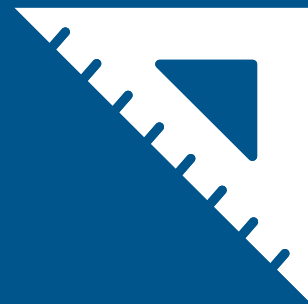
Do you have apps, shows, websites or tips to add to our list?
Email leigh_evanse@gse.harvard.edu



DIGITAL MEDIA FOR TEACHERS

AVAILABLE FOR BOTH APPLE AND ANDROID DEVICES

- **Seesaw:** App and website. Cost for families: Free. Cost for teachers: Free for 60 days then \$120/year. Ages: All. Content Area: All.
 - Includes three separate apps for teachers, students, and families that work together to create a powerful learning loop. Individuals can record and upload documentation including photos, videos, drawings, audio recordings, and files to online portfolios. These portfolios can then be viewed by teachers and parents. Schools own all content uploaded to Seesaw.
- **IXL:** App and website. Cost: Free with additional paid add-ons for teachers and schools. Ages: 4-14 year olds. Content Areas: math, language, science, social studies, and Spanish.
 - Students complete iterative activities and undertake assessments relating to core curriculum skills. IXL also features a diagnostic tool for assessing students' learning to address needs for further resources and scaffolding. Built-in scaffolding has proven to be important for using apps in distance learning, when children may not have as much access to adult guidance.



Do you have apps, shows, websites or tips to add to our list?
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